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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,943	01/07/2004	Lars Ivar Samuelson	077424-0105	3601

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EXAMINER	
SUCH, MATTHEW W	

ART UNIT	PAPER NUMBER
2891	

MAIL DATE	DELIVERY MODE
06/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

EL

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/751,943	Applicant(s) SAMUELSON ET AL.	
	Examiner Matthew W. Such	Art Unit 2891	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 May 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

B. WILLIAM BAUMEISTER
SUPERVISORY PATENT EXAMINER
MWS

Continuation of 11. does NOT place the application in condition for allowance because: The Applicant argues that the combination of Hantschel in view of Empedocles teaches "the nanowhisker is grown on a free end of the tip member". These arguments are not convincing. As clearly shown in the Office Action dated 12 February 2007, Hantschel teaches a nanowhisker (for example, Element 4 and 5 in Figs. 1 and 2) on the end of a tip member (for example, Element 2 in Figs. 1 and 2). This structural feature is conceded by the applicant, (see Remarks, Page 9, last paragraph and Page 10 first paragraph) and the Applicant merely argues that process by which the nanowhisker is produced is different from the claimed process. In response, the Office reminds the Applicant that the language, term, or phrase "grown", is directed towards the process of making a nanowhisker, as presently argued by the Applicant (see Remarks Page 10 first paragraph). It is well settled that "product by process" limitations in claims drawn to structure are directed to the product, per se, no matter how actually made. In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also, In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wethheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Marosi et al., 218 USPQ 289; and particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or otherwise. The above case law further makes clear that applicant has the burden of showing that the method language necessarily produces a structural difference. As such, the language "grown" only requires a nanowhisker, which does not distinguish the invention from Hantschel, who teaches the structure as claimed and who's structural teachings are conceded by the Applicant.

The Applicant argues that there is no motivation to combine the references to produce a heterojunction or metal catalyst particle with a nanowhisker. This is not persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In regards to the motivation for providing a heterojunction in a nanowhisker, the prior art of Empedocles teaches a variety of reasons one of ordinary skill in the art at the time the invention was made would be motivated to produce a nanowhisker with a heterojunction, as clearly shown in the Office Action dated 12 February 2007. To reiterate, for example, the Examiner has cited that it is notoriously well known that heterojunctions can be used to increase the electrical functionality of a nanowhisker (see, for example, Para. 0003, 0067, 0086, 0098-0100, of Empedocles), or that a heterojunction can be used to simplify the manufacturing process for a nanowhisker and increase the controllability of the process by providing a heterojunction used for shaping the nanowhisker by selective etching (see, for example, Para. 0029-0034, 0140-0144, 0149-0150 of Empedocles). In regards to the motivation for providing a metal catalyst particle, the prior art of Empedocles teaches a variety of reasons one of ordinary skill in the art at the time the invention was made would be motivated to include a metal catalyst nanoparticle. To reiterate, for example, the Examiner has cited that it is conventional to provide a metal catalyst particle with a nanowhisker in order to pre-pattern where a nanowhisker is positioned, thereby simplifying the manufacturing process (see, for example, Para. 0027, 0032-0039, 0044-0045, 0086-0096, etc. of Empedocles).